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10/039,081	01/02/2002	David J. Cole	61,733-080	9085

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EXAMINER

GREENE, JASON M

ART UNIT

PAPER NUMBER

1724

DATE MAILED: 07/07/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/039,081

Applicant(s)

COLE, DAVID J.

Examiner

Jason M. Greene

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-7, 10-16 and 19-25 is/are rejected.
- 7) ☒ Claim(s) 8, 9, 17, 18, 26 and 27 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claims

1. With regard to claim 1, it appears as though the phrase "the reclamation chambers" should be inserted between the words "interconnecting" and "and" in line 8.
2. With regard to claim 10, it appears as though the phrase "the reclamation chambers" should be inserted between the words "interconnecting" and "and" in line 13.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 2, 6, 10, 11, 15, 19, 20, and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by Shutic '599.

With regard to claim 1, Shutic '599 discloses an underbooth powder paint collection apparatus (22) positioned beneath a paint application booth (11) having an air

circulation system for painting a product with particulate paint comprising a plurality of discreet powder reclamation collectors (40) arranged in aligned rows beneath said booth, wherein each collector includes an upper inlet receiving air and paint particles from said booth and a lower outlet for reclaiming paint particles, and continuous aligned chambers (39) having opposed continuous side walls interconnecting the reclamation collectors and said inlets of said powder reclamation collectors providing a continuous air plenum communicating with said rows of collectors for directing air and particulate paint not adhered to the product into said discreet powder reclamation collectors in Figs. 1 and 2 and col. 3, line 33 to col. 6, line 40. The collector inlets are seen as being upper inlets since they are located above the lower outlets for reclaiming the paint particles.

With regard to claim 10, Shutic '599 discloses a booth assembly (11) for painting a product with particulate paint comprising a paint application chamber wherein powder paint is applied to the product, a plurality of discreet powder reclamation collectors (40) arranged in a row beneath said booth, wherein each collector includes an upper inlet receiving air and paint particles from said booth and a lower outlet for reclaiming paint particles, an inlet air plenum (38) and a return air plenum (not shown, connected to 42), said inlet air plenum providing an air draft in a downwardly direction in said application chamber forcing paint particles not adhered to the product downwardly towards said plurality of discrete reclamation collectors and said return plenum receiving filtered air from said reclamation collectors, and continuous aligned chambers (39) having opposed continuous side walls interconnecting the reclamation collectors and said inlets of said

powder reclamation collectors providing a continuous air plenum communicating with said rows of collectors for directing air and particulate paint not adhered to the product into said discreet powder reclamation collectors in Figs. 1 and 2 and col. 3, line 33 to col. 6, line 40. The collector inlets are seen as being upper inlets since they are located above the lower outlets for reclaiming the paint particles.

With regard to claim 19, Shutic '599 discloses an underbooth powder paint collection apparatus (22) positioned beneath a powder paint application booth (11) having an air circulation system for painting a product with particulate paint comprising a plurality of discreet powder reclamation collectors (40) aligned along a length of said paint application booth and being capable of reclaiming particulate paint, and an air chamber (39) continuously adjoining said plurality of powder reclamation collectors with said paint application booth thereby funneling air and particulate paint not adhered to the product to each of said plurality discreet powder reclamation collectors in Figs. 1 and 2 and col. 3, line 33 to col. 6, line 40.

With regard to claims 2, 11, and 20, Shutic '599 discloses each of the reclamation collectors defining a filter chamber including at least one air filter (not numbered) inserted therein being fluidly connected to the air circulation system in Figs. 1 and 2 and col. 5, lines 17-33.

With regard to claims 6, 15, and 24, Shutic '599 discloses each of said continuous air chambers being separable into zones capable of directing air and particulate paint to separate powder collectors in Figs. 1 and 2 and col. 3, line 33 to col. 6, line 40. The Examiner notes that the paint application booth is separated into three zones (29,33,45) which are demarcated by a flow of knock-down air. Since the flow of knock-down air prevents particulate paint from crossing between the zones, the knock-down air is seen as separating the continuous air chambers into three zones.

5. Claims 1, 5-7, 10, 14-16, 19, and 23-25 are rejected under 35 U.S.C. 102(b) as being anticipated by Rombach et al.

With regard to claim 1, Rombach et al. discloses an underbooth powder paint collection apparatus positioned beneath a paint application booth having an air circulation system for painting a product with particulate paint comprising a plurality of discreet powder reclamation collectors (52,53,54) arranged in aligned rows beneath said booth, wherein each collector includes an upper inlet receiving air and paint particles from said booth and a lower outlet for reclaiming paint particles, and continuous aligned chambers (not numbered, area above 52,53,54) having opposed continuous side walls interconnecting the reclamation collectors and said inlets of said powder reclamation collectors providing a continuous air plenum communicating with said rows of collectors for directing air and particulate paint not adhered to the product

into said discreet powder reclamation collectors in Figs. 1-7 and col. 3, line 29 to col. 7, line 40.

With regard to claim 10, Rombach et al. discloses a booth assembly for painting a product with particulate paint comprising a paint application chamber wherein powder paint is applied to the product, a plurality of discreet powder reclamation collectors (52,53,54) arranged in a row beneath said booth, wherein each collector includes an upper inlet receiving air and paint particles from said booth and a lower outlet for reclaiming paint particles, an inlet air plenum (not shown) and a return air plenum (18), said inlet air plenum providing an air draft in a downwardly direction in said application chamber forcing paint particles not adhered to the product downwardly towards said plurality of discrete reclamation collectors and said return plenum receiving filtered air from said reclamation collectors, and continuous aligned chambers (not numbered, area above 52,53,54) having opposed continuous side walls interconnecting the reclamation collectors and said inlets of said powder reclamation collectors providing a continuous air plenum communicating with said rows of collectors for directing air and particulate paint not adhered to the product into said discreet powder reclamation collectors in Figs. 1-7 and col. 3, line 29 to col. 7, line 40.

With regard to claim 19, Rombach et al. discloses an underbooth powder paint collection apparatus positioned beneath a powder paint application booth having an air circulation system for painting a product with particulate paint comprising a plurality of

discreet powder reclamation collectors (52,53,54) aligned along a length of said paint application booth and being capable of reclaiming particulate paint, and an air chamber (not numbered, area above 52,53,54) continuously adjoining said plurality of powder reclamation collectors with said paint application booth thereby funneling air and particulate paint not adhered to the product to each of said plurality discreet powder reclamation collectors in Figs. 1-7 and col. 3, line 29 to col. 7, line 40.

With regard to claims 5, 14, and 23, Rombach et al. discloses adjacent reclamation collectors being adjoined by a common panel (43,44) bowed to define a separate surface in each of said adjacent collectors in Figs. 1-7 and col. 3, line 29 to col. 7, line 40.

With regard to claims 6, 7, 15, 16, 24, and 25, Rombach et al. discloses each of said continuous air chambers being separable into zones capable of directing air and particulate paint to separate powder collectors, wherein adjacent zones are separated in each of said continuous air chambers by a wall (43,44) positioned across a width of said air chamber in Figs. 1-7 and col. 3, line 29 to col. 7, line 40.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 4, 13, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shutic '599.

Shutic '599 discloses each of said filter chambers including an upper wall defining at least one aperture having an air filter inserted therethrough, said at least one air filter sealing said aperture thereby preventing particulate paint from escaping from said reclamation collectors in Figs. 1 and 2.

Shutic '599 does not disclose the aperture being defined on a side wall of the filter chamber.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to shift the location of the aperture of Shutic '599 from the upper wall to the side wall in that shifting the location of parts without otherwise modifying the operation of the device is merely a choice of design. See *In re Japikse*, 86 USPQ 70.

8. Claims 3, 12, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shutic '599 in view of Shutic '958.

Shutic '599 does not disclose the collectors each including an air supply pressurized to produce a pulse thereby removing powder paint collected upon said at least one filter.

Shutic '958 discloses a similar powder paint collection assembly wherein each collector (346) includes an air supply (392) pressurized to produce a pulse thereby removing powder paint collected upon said at least one filter (378) in Figs 1 and 7-9 and col. 27, lines 52 to col. 28, line 6.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the reverse air pulse cleaning of Shutic '958 into the powder paint collection assembly of Shutic '599 to dislodge powder paint material from the walls of the filters to allow the powder paint to be reclaimed, as suggested by Shutic '958 in col. 27, lines 52-53.

Allowable Subject Matter

9. Claims 8, 9, 17, 18, 26, and 27 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

With regard to claims 8, 9, 17, 18, 26, and 27, the prior art made of record does not teach or fairly suggest the underbooth powder paint collection apparatus of claims 6 or 25 or the booth assembly of claim 16 wherein adjacent said powder collectors of adjacent zones abut and include abutting flanges matable for affixing adjacent said powders collectors together.

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Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The Ophardt et al., Shutic et al. '811, Johnson et al., Wilson, Cole et al. '737, and Cole et al. '909 references disclose similar powder paint booths.


11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason M. Greene whose telephone number is (703) 308-6240. The examiner can normally be reached on Tuesday - Friday (7:00 AM to 5:30 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Blaine Copenheaver can be reached on (703) 308-1261. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

Jason M. Greene
Examiner
Art Unit 1724



DUANE SMITH
PRIMARY EXAMINER

6-27-03

jmg
June 25, 2003